

October 5, 2021

PERSONAL & CONFIDENTIAL

Linda Morrison City of Battle Creek 10 North Division Street Battle Creek, MI 49014

RE: City of Battle Creek Retiree Health Care Plan

Dear Linda:

Transmitted via email, this is a copy of your OPEB accounting report for the fiscal year ending June 30, 2021. This information is intended to assist you in complying with Governmental Accounting Standards Board Statement No. 74 (GASB 74) Financial Reporting for Postemployment Benefit Plans Other than Pension Plans, and Statement No. 75 (GASB 75) Accounting and Financial Reporting for Postemployment Benefits Other than Pensions.

The actuarial values shown in this report are based on June 30, 2020 results rolled forward to June 30, 2021.

If you have any questions about this report, please call me at (616) 742-9244.

Sincerely,

Christian R. Veenstra, FCA, ASA, MAAA

President / Enrolled Actuary

Enclosure

City of Battle Creek Retiree Health Care Plan

Accounting Report

for the Period Ending June 30, 2021 under GASB Statement 74 & 75



WATKINS ROSS | 200 OTTAWA AVE N.W. | SUITE 600 | GRAND RAPIDS, MI 49503 | 616.456.9696

Report presented by:



October 2021

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INTRODUCTION AND CERTIFICATION

The schedules included in this report have been prepared in order to provide the information necessary to comply with Governmental Accounting Standards Board (GASB) Statement Nos. 74 and 75. This information may, at the discretion of management of the plan sponsor and its auditor, be used for the preparation of its financial statements. The calculations herein have been made based on our understanding of GASB 74 and 75, and may be inappropriate for other purposes.

The calculations summarized in this report involve actuarial calculations that require assumptions about future events. We believe that the assumptions used in the report are within the range of possible assumptions that are reasonable and appropriate for the purposes for which they have been used. However, other assumptions are also reasonable and appropriate and their use would produce different results.

This report contains additional information and details related to plan provisions and recommended contribution calculations.

This report was prepared on the basis of participant data and asset values as reported to us by the plan sponsor. Watkins Ross relied upon the data as submitted, and has no reason to believe that any information, which would have a material effect on the results of this valuation, was not considered in the preparation of the report.

The actuary certifying this report represents herself as meeting the Qualification Standards of the American Academy of Actuaries to render actuarial opinions contained in the report.

Prepared and Certified by:

Leah A. Dudley, ASA, MAAA

Health Actuary

Reviewed by:

Lisa J. Haves

Senior OPEB Analyst

COMMENTS

Purpose of Governmental Accounting Standards Board (GASB) Reporting

The objective of GASB is to provide guidelines and requirements for accounting and financial reporting by state and local governments for postemployment benefits other than pensions (OPEB). This statement establishes standards for recognizing and measuring liabilities, deferred inflows and outflows of resources and methods and assumptions that are required to be used to project benefit payments and discount those payments to their actuarial present value.

The methods and assumptions may or may not be an appropriate measure of the plan's liability for funding purposes or for reporting liabilities under Public Act 202 of the State of Michigan. Thus, liabilities and other values calculated for those purposes may differ from the ones used for GASB reporting.

State of Michigan Public Act 202

Public Act 202 (PA 202) was drafted to address the underfunded status of pension and retiree healthcare plans of local governments in Michigan. Accordingly, PA 202 included transparency and funding requirements. In addition, in order that the plans' funded status be reported on a consistent basis, Uniform Assumptions were published. While all of the Uniform Assumptions have a sound and reasonable basis, some might not be appropriate for each plan and therefore may be different than what is used for funding. Additionally, some of the assumptions may differ from what is required for reporting under GASB.

Actuarially Determined Contribution for GASB reporting

GASB reporting includes a 10-year history of actual annual amounts contributed by an employer on behalf of the OPEB plan and an Actuarially Determined Contribution (ADC). In addition, the report includes a summary of assumptions used to determine the ADC. This reporting requirement presumes a separate funding report is completed. However, for many employers, separate funding studies have not been solicited. We have included a contribution section in this report (Schedules of Required Supplementary Information: Description of Actuarially Determined Contribution) that provides this information. The assumptions and methods used for these calculations are derived from those used for GASB reporting and are not necessarily consistent with PA 202. This report includes an ADC determined using an amortization of the unfunded liability over average future service for actives for GASB reporting purposes.

Actuarially Determined Contribution under Public Act 202

Public Act 202 requires a calculation of an ADC using the Uniform Assumptions prescribed under PA 202. This ADC differs from the one used for the 10-year reporting history noted in the paragraph above. (Schedules of Required Supplementary Information: State of Michigan Public Acts 530 and 202 Information)

Changes in Actuarial Assumptions, Plan Changes and Expected Actuarial Experience

There was an actuarial gain (decrease in liability) of \$190,185, due to the actual benefit payments being lower than expected. The combination of actuarial assumption changes, described in the "Assumptions and Methods for Calculation of Actuarially Determined Contribution" section of this report, generated an actuarial loss (increase in liability) of \$2,464,152.

A new IAFF collective bargaining agreement was effective July 1, 2020 and includes changes to the eligibility for the OPEB plan. The effect on the liability of these changes will be reflected on the next full valuation for June 30, 2022.

PLAN DESCRIPTION

Summary of Significant Accounting Policies

For purposes of measuring the net Other Post-Employment Benefits (OPEB) liability, deferred outflows of resources and deferred inflows of resources related to OPEB, and OPEB expenses, information about the fiduciary net position of the City of Battle Creek Retiree Health Care Plan and additions to/deductions from the City's fiduciary net position have been determined on the same basis as they are reported by the City of Battle Creek. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

Plan Description

City of Battle Creek Retiree Health Care Plan is a single employer plan established and administered by City of Battle Creek and can be amended at its discretion.

Benefits Provided

A summary of the benefits provided is available in the Plan Provisions section of the report.

Summary of Plan Participants

As of June 30, 2020, Retirement Plan membership consisted of the following:

| | General | Police & Fire | Total |
|----------------------------|---------|---------------|-------|
| Active members | 172 | 179 | 351 |
| Inactive members | 0 | 0 | 0 |
| Retirees and beneficiaries | 157 | 153 | 310 |
| Total members | 329 | 332 | 661 |

Contributions

The City of Battle Creek Retiree Health Care Plan was established and is being funded under the authority of the City and under agreements with the unions representing various classes of employees. The plan sponsor's funding policy is that the police members contribute 2% of pay and the City contributes 3% of pay during active employment. Fire members contribute 3% of pay while fire retirees hired after May 14, 2007 contribute 3% of pension into 149 trust. In addition, the plan sponsor will make projected trust contributions as reported while assets are drawn down to pay benefits. There are no long-term contracts for contributions to the plan.

ASSUMPTIONS AND METHODS

The City of Battle Creek's OPEB liability was measured as of June 30, 2021.

Actuarial Assumptions

The total OPEB liability was determined by an actuarial valuation as of June 30, 2020 rolled forward to June 30, 2021. The following actuarial assumptions were used in the measurement:

Inflation 2.50%

Salary increases 3.50% (for purpose of allocating liability)

Investment rate of return 7.35% (including inflation)

20-year Aa Municipal bond rate 2.18% (S&P Municipal Bond 20-Year High Grade Rate Index)

Mortality Public General and Public Safety 2010 Employee and Healthy

Retiree, Headcount weighted

Improvement Scale MP-2019

The long-term expected rate of return on retirement plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of retirement plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the retirement plan's target asset allocation are summarized in the following table:

| | | Long-Term Expected |
|---------------------|-------------------|---------------------|
| Asset Class | Target Allocation | Real Rate of Return |
| Global Equity | 60.0% | 5.25% |
| Global Fixed Income | 20.0% | 1.25% |
| Private Investments | 20.0% | 7.25% |

The sum of each target allocation times its long-term expected real rate, plus inflation, is 7.35%.

Discount Rate

The discount rate used to measure the total OPEB liability was **2.30%**. The projection of cash flows used to determine the discount rate included reported, projected contributions while assets are drawn down to pay retiree benefits. Based on these assumptions, the retirement plan's fiduciary net position was projected to be sufficient to make projected future benefit payments of current plan members through 2028 – the cross-over point. For projected benefits that are covered by projected assets, the long-term expected rate was used to discount the projected benefits. From the year that benefit payments were not projected to be covered by the projected assets (the "depletion date"), projected benefits were discounted at a discount rate reflecting a 20-year AA/Aa tax-exempt municipal bond yield. A single equivalent discount rate that yields the same present value of benefits is calculated. This discount rate is used to determine the Total OPEB Liability. As of June 30, 2020 the discount rate used to value OPEB liabilities was 2.73%.

RECONCILIATION AND RECOGNITION OF NET OPEB LIABILITY

Changes in the Net OPEB Liability

| | Total OPEB Liability (a) | Plan Fiduciary Net Position (b) | Net OPEB Liability (a) - (b) |
|--|--------------------------------|--|------------------------------------|
| Balance at June 30, 2020 | \$68,870,210 | \$6,312,198 | \$62,558,012 |
| Changes during the Year | | | |
| Service Cost | 1,624,371 | | 1,624,371 |
| Interest | 1,903,031 | | 1,903,031 |
| Experience (Gains)/Losses | (190,185) | | (190,185) |
| Change in plan terms | 0 | | 0 |
| Change in actuarial assumptions | 2,464,152 | | 2,464,152 |
| Contributions to OPEB trust | | 373,965 | (373,965) |
| Contributions/benefit from general operating funds | | 960,184 | (960,184) |
| Employee and Retiree Contributions | | 370,676 | (370,676) |
| Net Investment Income | | 1,772,773 | (1,772,773) |
| Benefit Payments; | | | |
| Including Refunds of Employee Contributions | (1,572,949) | (1,572,949) | 0 |
| Administrative Expenses | | (13,816) | 13,816 |
| Other Changes | | 0 | 0 |
| Total Changes | 4,228,420 | 1,890,832 | 2,337,588 |
| | | | |
| Balance at June 30, 2021 | \$73,098,630 | \$8,203,031 | \$64,895,599 |

Net OPEB Liability – Discount and Trend Rate Sensitivities

The following presents the net OPEB liability (NOL) of the City, calculated using trend and discount rates 1% higher and lower than base assumptions:

| Discount | 1% Decrease | Current Rate | 1% Increase |
|-----------------------------|-----------------------------|------------------------------|-----------------------------|
| Total OPEB Liability | \$86,632,818 | \$73,098,630 | \$62,542,638 |
| Plan Fiduciary Net Position | 8,203,031 | 8,203,031 | 8,203,031 |
| Net OPEB Liability | \$78,429,787 | \$64,895,599 | \$54,339,607 |
| | | | |
| Trend | 1% Decrease | Current Rate | 1% Increase |
| Trend Total OPEB Liability | 1% Decrease \$64,017,257 | Current Rate \$73,098,630 | 1% Increase \$84,929,125 |
| | | | |

RECONCILIATION AND RECOGNITION OF NET OPEB LIABILITY

OPEB Expense

Below are the components of the Total OPEB Expense:

| | Fiscal Year Ending 06/30/2021 |
|---|----------------------------------|
| Service Cost | \$1,624,371 |
| Interest on Total OPEB Liability | 1,903,031 |
| Experience (Gains)/Losses | (347,324) |
| Changes in Plan Terms | 0 |
| Changes in Assumptions | (1,051,031) |
| Employee and Retiree Pension Contributions | (370,676) |
| Projected Earnings on OPEB Plan Investments | (468,286) |
| Investment Earnings (Gains)/Losses | (143,471) |
| Administrative Expenses | 13,816 |
| Other Changes in Fiduciary Net Position | 0 |
| Total OPEB Expense | \$1,160,430 |

OPEB Plan Fiduciary Net Position

The OPEB Plan Fiduciary Net Position as of June 30, 2021 is \$8,203,031.

Deferred Inflows and Outflows of Resources Related to OPEB Plan

| | Deferred Outflows | Deferred Inflows |
|------------------------------------|-------------------|------------------|
| | Of Resources | Of Resources |
| Experience (Gains)/Losses | 0 | 1,042,634 |
| Changes of Assumptions | 7,786,388 | 8,755,770 |
| Investment Earnings (Gains)/Losses | 0 | 760,750 |
| Total | \$7,786,388 | \$10,559,154 |

Amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in OPEB expense as follows:

| Year Ended | Amount |
|------------|---------------|
| June 30, | Recognized |
| 2022 | \$(1,541,826) |
| 2023 | (1,551,134) |
| 2024 | (858,958) |
| 2025 | 1,179,152 |
| 2026 | 0 |
| Thereafter | 0 |

RECONCILIATION AND RECOGNITION OF NET OPEB LIABILITY

Reconciliation of Net OPEB Liability

| | Net OPEB Liability |
|--|--------------------|
| Net OPEB Liability June 30, 2020 | \$62,558,011 |
| Total OPEB expense | 1,160,430 |
| Employer Contributions | (1,334,149) |
| Change in deferred outflows of resources | (32,602) |
| Change in deferred inflows of resources | 2,543,909 |
| Net OPEB Liability June 30, 2021 | \$64,895,599 |

Total OPEB Liability by Participant Status

| | Total OPEB Liability |
|----------------------------|----------------------|
| Active participants | \$38,934,141 |
| Inactive participants | 0 |
| Retirees and beneficiaries | 34,164,489 |
| Total OPEB Liability | \$73,098,630 |

Description of Actuarially Determined Contributions

Although not required as part of GASB reporting, we have included an Actuarially Determined Contribution in order to provide information for funding. This recommended contribution is designed to eventually fund your plan enough that you can pay retiree benefits directly from the trust instead of general operating funds. The amortization period is based on average future working years for active employees.

| Actuarially Determined Contribution (ADC) ¹ | Fiscal Year Ending June 30, | |
|--|-----------------------------|----------------|
| | <u>2022</u> | <u>2021</u> |
| Discount rate | 2.30% | 2.73% |
| Amortization period | 10 years | 11 years |
| Amortization method | Level % of pay | Level % of pay |
| Normal cost | 1,763,720 | 1,624,371 |
| Amortization of Net OPEB Liability | 6,154,325 | 5,477,140 |
| Interest to end of year | 182,115 | 193,871 |
| Total ADC | \$8,100,160 | \$7,295,382 |

PA 202 was issued by the State of Michigan and requires the calculation of other "contribution" amounts. These are

- 1. The Actuarially Determined Contribution (ADC) using Assumptions for financial reporting and
- 2. The minimum required amount to be deposited into an OPEB trust

The first of these contributions as shown above, \$7,295,382, is an amount required to be reported to the State of Michigan and may be used to determine whether a Corrective Action Plan (CAP) must be adopted if one hasn't yet been implemented. *It is not a required contribution.*

The second of these numbers is the actual minimum amount the State of Michigan requires you to deposit into a trust and it is based on the normal cost (actuarially calculated) for those covered by your plan and hired after June 30, 2018. This amount is \$71,945 for 2021 and is projected to be \$70,436 for 2022. Accordingly, to the extent past contributions have been sufficient to cover the past service liability and normal cost for those hired after June 30, 2018, this contribution requirement has been met.

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¹ ADC for 2021 and 2022 is based on actuarial assumptions consistent with reporting as of June 30, 2020 and June 30, 2021, respectively.

State of Michigan Public Acts 530 and 202 Information

| Financial information | 2021 |
|---|-------------|
| Assets (Fiduciary net position) | \$8,203,031 |
| Liabilities (Total OPEB Liability) | 73,098,630 |
| Funded ratio for the Plan Year | 11.22% |
| Actuarially Determined Contribution | 7,295,382 |
| Is ADC calculated in compliance with No. Letter 2018-3? | Yes |

| Membership | 2021 |
|--|-----------|
| Number of active members | 351 |
| Number of inactive members | 0 |
| Number of retirees and beneficiaries | 310 |
| Premiums paid on behalf of the retirants | \$960,184 |

Investment Performance

This information is available from the Investment Manager

| Actuarial Assumptions | 2021 |
|---|----------------|
| Actuarially assumed rate of investment return | 7.35% |
| Discount rate | 2.30% |
| Amortization method used for funding unfunded liability | Level % of Pay |
| Amortization period used for funding unfunded liability | 11 years |
| Is each division closed to new employees | No |
| Healthcare inflation assumption next year | 7.50% |
| Healthcare inflation assumption - long term | 4.50% |

| Uniform Assumptions | 2021 |
|---|-------------|
| Actuarial value of assets using uniform assumptions | \$8,203,031 |
| Actuarial accrued liability using uniform assumptions | 73,757,962 |
| Funded ratio using uniform assumptions | 11.12% |
| Actuarially Determined Contribution (ADC) using uniform assumptions | \$6,569,726 |

Changes in Net OPEB Liability and Related Ratios

| Fiscal Year Ending | | | Prior Actuary | Prior Actuary | Prior Actuary |
|---|--------------|--------------|---------------|---------------|---------------|
| | 06/30/2021 | 06/30/2020 | 06/30/2019 | 06/30/2018 | 06/30/2017 |
| Total OPEB Liability | | | | | |
| Service Cost | \$1,624,371 | \$1,217,385 | \$1,503,153 | \$2,444,926 | \$2,866,687 |
| Interest | 1,903,031 | 2,024,859 | 2,087,663 | 2,752,781 | 2,366,860 |
| Changes of Benefit Terms | 0 | 0 | 0 | 0 | 0 |
| Difference between Expected and Actual Experience | (190,185) | (271,616) | 0 | (1,747,090) | 0 |
| Change of Assumptions | 2,464,152 | 5,092,881 | 4,524,282 | (21,345,849) | (8,351,874) |
| Benefit Payments (Including Refunds of Employee Contributions) | (1,572,949) | (1,875,778) | (1,904,580) | (2,178,985) | (1,600,811) |
| Net Change in Total OPEB Liability | 4,228,420 | 6,187,731 | 6,210,518 | (20,074,217) | (4,719,138) |
| Total OPEB Liability – Beginning | 68,870,210 | 62,682,479 | 56,471,961 | 76,546,178 | 81,265,316 |
| Total OPEB Liability – Ending (a) | \$73,098,630 | \$68,870,210 | \$62,682,479 | \$56,471,961 | \$76,546,178 |
| | | | | | |
| Plan Fiduciary Net Position | | | | | |
| Employer Contributions | \$1,334,149 | \$1,410,390 | \$1,446,699 | \$1,734,099 | \$1,204,642 |
| Contributions – Employee and Retiree pension | 370,676 | 390,550 | 318,750 | 439,777 | 228,042 |
| Net Investment Income | 1,772,773 | 147,822 | 177,435 | 365,451 | 807,558 |
| Benefit Payments (Including Refunds of Employee Contributions) | (1,572,949) | (1,875,778) | (1,920,528) | (2,178,985) | (1,600,811) |
| Administrative Expenses | (13,816) | (11,266) | (12,876) | (14,677) | (10,920) |
| Other | 0 | 0 | 0 | 0 | 0 |
| Net Change in Fiduciary Net Position | 1,890,833 | 61,718 | 9,480 | 345,665 | 628,511 |
| Plan Fiduciary Net Position – Beginning | 6,312,198 | 6,250,480 | 6,241,000 | 5,895,335 | 5,266,824 |
| Plan Fiduciary Net Position – Ending (b) | 8,203,031 | 6,312,198 | 6,250,480 | 6,241,000 | 5,895,335 |
| Net OPEB Liability – Ending (a)-(b) | \$64,895,599 | \$62,558,012 | \$56,431,999 | \$50,230,961 | \$70,650,843 |
| | | | | | |
| Plan Fiduciary Net Position as a Percentage of Total OPEB Liability | 11.22% | 9.17% | 9.97% | 11.05% | 7.70% |
| Covered Employee Payroll | \$25,614,713 | \$25,494,729 | \$29,984,686 | \$28,970,711 | \$30,761,954 |
| Net OPEB Liability as Percentage of Payroll | 253.4% | 245.4% | 188.2% | 173.4% | 229.7% |
| | | | | | |
| Actuarially Determined Contribution | \$7,295,382 | \$5,676,569 | \$2,819,532 | \$2,723,435 | \$3,823,865 |
| Employer Contribution/benefit payments | (1,334,149) | (1,410,390) | (1,446,699) | (1,734,099) | (1,204,642) |
| Contribution Deficiency/(Excess) | \$5,590,557 | \$4,266,179 | \$1,372,833 | \$989,336 | \$2,619,223 |
| ADC as a Percentage of Covered Payroll | 28.5% | 22.3% | 9.4% | 9.4% | 12.4% |
| Employer Contribution as a Percentage of Covered Payroll | 5.2% | 5.5% | 4.8% | 6.0% | 3.9% |

Assumptions and Methods for Calculation of Actuarially Determined Contribution

Valuation dateJune 30, 2020Measurement dateJune 30, 2021Reporting dateJune 30, 2021

Actuarial Methods

Cost method Entry Age Normal (level percentage of compensation)

Asset valuation method Market value

Actuarial Assumptions

Discount Rate – 2.30% for June 30, 2021 liability and 2022 contribution

Rationale – Blended rate based on long term expected return and the 20-year Aa Municipal Bond rate

20-year Aa Municipal Bond Rate – 2.18% (S&P Municipal Bond 20-Year High Grade Rate Index) Rationale – Current bond rate (based on information published by S&P, LLC as of June 30, 2021)

Salary Scale - 3.50% (for purpose of allocating liability)

Rationale - Per employer experience and expectations

Return on Plan Assets – 7.35%

Rationale – Provided by investment manager

Mortality Rates – Public General and Public Safety 2010 Employee and Healthy Retiree, Headcount weighted, MP-2019 improvement

Rationale – Current mortality rates for municipalities

Termination Rates – Sample rates below

| Years of | General | Years of | General |
|----------|-----------|----------|-----------|
| Service | Employees | Service | Employees |
| 0 | 13.72% | 5 | 4.83% |
| 1 | 11.41 | 10 | 3.22 |
| 2 | 9.31 | 15 | 2.38 |
| 3 | 7.35 | 20 | 1.82 |
| 4 | 6.02 | 25+ | 1.54 |

| Age | Police | Fire |
|-------|--------|-------|
| 25 | 4.00% | 3.50% |
| 30 | 3.68 | 2.90 |
| 35 | 3.16 | 1.50 |
| 40 | 1.88 | 0.60 |
| 45-50 | 1.40 | 0.50 |
| 55+ | 0.40 | 0.50 |

Rationale – Based on past employer experience

Retirement Rates – See rates below

| | City | General |
|-------|----------|---------|
| Age | Managers | Other |
| 50-54 | 20% | |
| 55-56 | 20 | 20% |
| 57-60 | 21 | 21 |
| 61-63 | 22 | 22 |
| 64 | 23 | 23 |
| 65-66 | 25 | 25 |
| 67 | 26 | 26 |
| 68 | 28 | 28 |
| 69 | 30 | 30 |
| 70+ | 100 | 100 |

| Age | Police | IAFF | OSP |
|-------|--------|------|-----|
| 50 | | | 20% |
| 51 | | | 15 |
| 52-56 | | | 10 |
| 57 | | | 15 |
| 58 | | | 25 |
| 59 | | | 30 |
| 60-65 | 35% | 20% | 100 |
| 66 | 25 | 15 | 100 |
| 67 | 20 | 10 | 100 |
| 68-71 | 15 | 10 | 100 |
| 72 | 15 | 15 | 100 |
| 73 | 25 | 25 | 100 |
| 74 | 30 | 30 | 100 |
| 75+ | 100 | 100 | 100 |

| Service | Police | Fire |
|---------|--------|------|
| 25 | 60% | 30% |
| 26 | 30 | 15 |
| 27 | 30 | 15 |
| 28 | 30 | 15 |
| 29 | 20 | 15 |
| 30 | 20 | 50 |
| 31 | 20 | 40 |
| 32 | 20 | 30 |
| 33 | 20 | 20 |
| 34 | 20 | 20 |
| 35+ | 100 | 100 |

Rationale – Continued from prior valuations and checked against experience for reasonableness

Disability Rates – See rates below

| | | Police & Fire | | | |
|-------|---------|---------------|--------|--|--|
| Age | General | Male | Female | | |
| 20-30 | 0.02% | 0.06% | 0.08% | | |
| 35 | 0.05 | 0.06 | 0.08 | | |
| 40 | 0.08 | 0.15 | 0.27 | | |
| 45 | 0.20 | 0.20 | 0.30 | | |
| 50 | 0.29 | 0.37 | 0.43 | | |
| 55 | 0.38 | 0.67 | 0.57 | | |
| 60 | 0.39 | 1.06 | 0.76 | | |
| 65 | 0.39 | 1.24 | 0.92 | | |

Rationale – Common to public employer plan valuations

Marital Assumption – 70% of active employees will have a covered spouse at retirement with females 3 years younger than males; Actual spouse data used for retirees

Rationale – Consistent with experience

Claims Costs - See monthly rates below

| Plan | Single | Double | Comp | Medicare |
|---------------------------|-----------|------------|------------|----------|
| Simply Blue-PPO | \$ 608.05 | \$1,459.33 | | |
| Community Blue PPO2 | 938.77 | 2,253.01 | | |
| BCBS Traditional Plan | 1,033.72 | 2,480.90 | \$1,604.11 | |
| Community Blue PPO 401(h) | 919.90 | 2,207.76 | | |
| Medicare Advantage Plan | | | | \$395.43 |

Rationale - Premium rates in effect as of the valuation date

Utilization – 90% of eligible employees will elect coverage at retirement; Actual coverage used for non-active Rationale – A conservative estimate given the reported number of opt-out members

Plan selection

Retirees covered under the Simply Blue or either of the Community Blue Plans will elect the Medicare Advantage plan at age 65

Of the active Fire members hired prior to May 14, 2007 that elect coverage, 15% will choose Simply Blue, 50% Community Blue and 35% BCBS Traditional Plan

Rationale – Consistent with experience

Implicit Subsidy - None

Rationale – Premiums for police and union are set such that pre-65 costs for those groups are expected to be fully covered by the amount charged

Medical Trend

Pre-65: 8.25% graded down to 7.5% after one year and then by 0.25% per year to an ultimate rate of 4.5%

Post-65: 6.5% graded down to 5.75% after one year and then by 0.25% per year to an ultimate rate of 4.5%

Rationale – Based on State of Michigan trend survey

Data Collection

Date and form of data - All personnel and asset data was prepared by the plan sponsor or a representative and was generally relied upon as being correct and complete without audit by Watkins Ross

Assumption changes since prior valuation

- Discount rate changed from 2.73% to 2.30%
- Medical trend rates updated

Assumptions used for PA 202 Reporting

Salary Scale - 3.00%

All other assumptions are the same as used for GASB

Schedule of Difference between Actual and Expected Experience

| | Difference between expected and actual | Recognition period | Am | ount Recognized | in Year Ended Jui | ne 30, | | | | Deferred Outflow of | Deferred Inflow of |
|--------------|--|--------------------|--------------|-----------------|-------------------|--------------|-------------|------|-------|------------------------|-----------------------|
| Year | Experience | (years) | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027+ | Resources | Resources |
| 2018 | (1,747,090) | 6.78 | (257,614) | (257,614) | (257,614) | (201,405) | | | | - | (716,633) |
| 2019 | - | 6.78 | - | - | - | - | - | | | - | - |
| 2020 | (271,616) | 5.89 | (46,090) | (46,090) | (46,090) | (46,090) | (41,166) | | | - | (179,436) |
| 2021 | (190,185) | 4.36 | (43,620) | (43,620) | (43,620) | (43,620) | (15,705) | - | - | - | (146,565) |
| Net recogniz | zed in OPEB expense | | \$ (347,324) | \$ (347,324) | \$ (347,324) | \$ (291,115) | \$ (56,871) | \$ - | \$ - | \$ - | \$ (1,042,634) |

Schedule of Changes in Assumptions

| | | Recognition | | | | | | | | Deferred | Deferred |
|---------------|--------------------|-------------|----------------|-----------------|-------------------|--------------|--------------|------|-------|--------------|----------------|
| | Changes in | period | Am | ount Recognized | in Year Ended Jui | ne 30, | | | | Outflow of | Inflow of |
| Year | Assumptions | (years) | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027+ | Resources | Resources |
| 2018 | (21,345,849) | 6.78 | (3,147,520) | (3,147,520) | (3,147,520) | (2,460,730) | | | | - | (8,755,770) |
| 2019 | 4,524,282 | 6.78 | 667,121 | 667,121 | 667,121 | 667,121 | 521,556 | - | - | 2,522,919 | - |
| 2020 | 5,092,881 | 5.89 | 864,196 | 864,196 | 864,196 | 864,196 | 771,901 | | | 3,364,489 | - |
| 2021 | 2,464,152 | 4.36 | 565,172 | 565,172 | 565,172 | 565,172 | 203,464 | - | - | 1,898,980 | - |
| Net recognize | ed in OPEB expense | | \$ (1,051,031) | \$(1,051,031) | \$(1,051,031) | \$ (364,241) | \$ 1,496,921 | \$ - | \$ - | \$ 7,786,388 | \$ (8,755,770) |

Schedule of Differences between Projected and Actual Earnings on OPEB Plan Investments

| | Difference between expected and actual earnings | Recognition period | Am | ount Recognized | in Year Ended Jui | ne 30, | | | | Deferred Outflow of | Deferred Inflow of |
|-------------|---|--------------------|--------------|-----------------|-------------------|--------------|--------------|------|-------|------------------------|-----------------------|
| Year | on OPEB assets | (years) | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027+ | Resources | Resources |
| 2018 | 46,530 | 5 | 9,306 | 9,306 | | | | | | 9,306 | - |
| 2019 | 254,118 | 5 | 50,824 | 50,824 | 50,822 | | | | | 101,646 | - |
| 2020 | 286,479 | 5 | 57,296 | 57,296 | 57,296 | 57,295 | | | | 171,887 | - |
| 2021 | (1,304,486) | 5 | (260,897) | (260,897) | (260,897) | (260,897) | (260,898) | | | - | (1,043,589) |
| Net recogni | zed in OPEB expense | | \$ (143,471) | \$ (143,471) | \$ (152,779) | \$ (203,602) | \$ (260,898) | | | \$ 282,839 | \$ (1,043,589) |

Total Deferred Outflow/(Inflow) of Resources

| Amount Recognized in Year Ended June 30, | | | | | | | | |
|--|----------------|----------------|--------------|--------------|-----|---|-----|-----|
| | 2022 | 2023 | 2024 | 2025 | 202 | 6 | 202 | 27+ |
| Total Deferred Outflow/(Inflow) of Resources | \$ (1,541,826) | \$ (1,551,134) | \$ (858,958) | \$ 1,179,152 | \$ | - | \$ | - |

TRUSTEE INFORMATION

Projected benefit payments

In addition to the benefit payments shown above, a graphic illustration of 20 years of projected benefit payments for the current group of covered lives is shown below. Plans open to new participants could see higher than expected payments if new members are hired and are eligible to retire during the projection period.

The chart below reflects expected cash flows to pay benefits for current plan participants.



SUMMARY OF PLAN PROVISIONS

Plan Name City of Battle Creek Retiree Health Care Plan

Eligibility Requirements

Fire OSP Age 50 with 25 years of service or

Age 60 with any amount of service

Police, Fire IAFF and non-rep Fire

Any age with 25 years of service or

Age 60 with any amount of service

MERS City Managers Age 50 with 25 years of service or

Age 55 with 15 years of service or Age 60 with 10 years of service or

All other MERS members Age 55 with 25 years of service or

Age 60 with 10 years of service or

Disability Retirement Eligibility

Duty disability retiree Any age with any years of service; benefit commences

immediately

Non-duty disability retiree Any age with 5 years of service; benefit commences

immediately

Hire date requirements applicable to General members

| Collectively Bargained Group | Hired on or before |
|------------------------------|--------------------|
| AFSCME | December 1, 2010 |
| ATU | January 1, 2010 |
| BCSA | June 21, 2011 |
| SEIU | June 30, 2011 |

Employer Benefits

Police and Fire members retired prior to January 1, 2007 (401(h))

• City pays for retiree health care premium up to a maximum total annual amount \$500,000 for the group

Police members retired on or after January 1, 2007

- Members receive a maximum \$200 per month (single or married) prorated for service
- Surviving spouse receives \$80 per month prorated for service
- Beginning in 2010, members are eligible for an additional dollar subsidy of up to \$8,000 per year

Fire members hired after May 14, 2007

- Members contribute 3% pay and retirees contribute 3% of pension into 149 Trust
- Members receive a maximum \$200 per month prorated for service
- Surviving spouse receives \$80 per month prorated for service

Fire members hired prior to May 14, 2007 and retired after July 1, 2004

- Members contribute 3% pay into 149 Trust
- Members receive full payment of healthcare premiums

SUMMARY OF PLAN PROVISIONS

General members

• Members receive a maximum \$200 per month based on service

| Years of service | Employee | Dependent | Total |
|------------------|----------|-----------|--------|
| 15+ | \$ 120 | \$ 80 | \$ 200 |
| 14 | 114 | 76 | 190 |
| 13 | 108 | 72 | 180 |
| 12 | 102 | 68 | 170 |
| 11 | 96 | 64 | 160 |
| 10 | 90 | 60 | 150 |

Changes since prior valuation: None

GLOSSARY

A number of special terms and concepts are used in connection with OPEB plans and the OPEB accounting report. The following list reviews a number of these terms and provides a brief discussion of their meaning.

Actuarially Determined Contribution (ADC) – A target or recommended contribution for the reporting period, determined in conformity with Actuarial Standards of Practice based on the most recent measurement available when the contribution for the reporting period was adopted.

Actuarial Cost Method – This is a mathematical formula which is used to allocate the present value of projected benefits to past and future plan years.

Amortization – The difference between actual and expected investment returns, the difference between actual and expected experience, and the impact of any plan or assumption changes will be amortized and paid over future years.

Depletion Date (Cross-over Point) – The projected date (if any) where plan assets, including future contributions, are no longer sufficient to pay Projected Benefit Payments to current members.

Long-term expected rate of return – The rate of return based on the nature and mix of current and expected plan investments and over the time period from when an employee is hired to when all benefits to the employee have been paid.

Market Value of Assets – The market value of all assets in the fund including any accrued contribution for the previous plan year, which was not paid by the end of the year.

Measurement Date – The date the Total OPEB Liability, Fiduciary Net Position, and Net OPEB Liability are determined.

Net OPEB Liability (NOL) - The Total OPEB Liability less the Plan Fiduciary Net Position.

Normal Cost – For GASB 74/75 purposes, normal cost is the equivalent of service cost (see definition of service cost).

Other Post-Employment Benefits (OPEB) — Benefits (such as death benefits, life insurance, disability, and long-term care) that are paid in the period after employment and that are provided separately from a pension plan, as well as healthcare benefits paid in the period after employment, regardless of the manner in which they are provided. OPEB does not include termination benefits or termination payments for sick leave.

OPEB Expense (OE) – The change in the Net OPEB Liability (NOL) recognized in the current measurement period. Changes to the NOL not fully recognized in a given year's OPEB expense will be maintained as deferred inflows and deferred outflows. These will be recognized incrementally in the OPEB expense over time.

GLOSSARY

Plan assets – Stocks, bonds and other investments that have been segregated and restricted (usually in a trust) to provide for post-retirement benefits. Assets not segregated in a trust, or otherwise effectively restricted so that they cannot be used by the employer for other purposes, are not plan assets, even though it may be intended that those assets be used to provide post-retirement benefits.

Plan Fiduciary Net Position – The market value of plan assets as of the measurement date.

Present Value – The present value of a future payment or a series of payments is the amount of each payment, discounted to recognize the time value of money, and further reduced for the probability that the payment might not be made because of death, disability or termination of employment.

Projected Benefit Payments – All benefits projected to be payable to current active and inactive participants as a result of their past service and their expected future service.

Real Rate of Return – The rate of return on an investment after the adjustment to eliminate inflation.

Reporting Date – The date that represents the fiscal year end for the plan or employer.

Service Cost – The value of portion of Total OPEB Liability earned during the current year computed in accordance with GAAP accounting rules.

Single Equivalent Discount Rate – The single rate that gives the same total present value as discounting the Projected Benefit Payments with the long-term expected rate of return until the Depletion Date and discounting any remaining Projected Benefit Payments with the yield on a 20-year AA/Aa tax-exempt municipal bond index.

Total OPEB Liability (TOL) – The actuarial present value of the accrued benefit determined under the Entry Age actuarial cost method calculated using the blended Single Equivalent Discount Rate.

Valuation Date – The date as of which an actuarial valuation is performed.